Y^1 is -CH=CH-, -C≡C- or -CH(OH)CH(OH)-;

each of Z^1 and Z^2 is independently OH or a conversion-inhibiting group;

Y^2 is a phenyl group, an alkyl-substituted phenyl group having from 1 to about 6 [carbons] carbon atoms in the alkyl chain, or an alkyl chain having from 1 to 6 [carbons] carbon atoms;

Y^3 is H or a group having the formula $-C(O)R^2$ or $-S(O)_2R^2$;

R^2 is a straight-chained alkyl moiety selected from the group consisting of $-(CH_2)_3CH_3$, $-(CH_2)_5CH_3$, $-(CH_2)_7CH_3$ and $-(CH_2)_9CH_3$, or an alkenyl group or alkynyl group having from 2 [1] to 23 carbon atoms in the aliphatic chain;

Z^2 is a phosphorylcholine attachment-inhibiting group selected from the group consisting of $-X^1$, $-OX^1$, $-X^2X^3$ and $-OX^2X^3$;

X^1 is selected from the group consisting of -C(O)H, $-CO_2H$, $[CH_3(C(CH_3)_3)_2]$ CH_3, $C(CH_3)_3$, $Si(CH_3)_3$, $SiCH_3(C(CH_3)_3)_2$, $Si(C(CH_3)_3)_3$, $Si(PO_4)_2C(CH_3)_3$, a phenyl group, an alkyl-substituted phenyl group having from 1 to 6 [carbons] carbon atoms in the alkyl chain, an alkyl chain having from 1 to 6 [carbons] carbon atoms, an amino group, a fluorine atom, a chlorine atom, and a group having the formula $C(R^3R^4)OH$;

X^2 is selected from the group consisting of CH_2-, $C(CH_3)_2$-, $Si(PO_4)_2$-, $Si(CH_3)_2$-, $SiCH_3PO_4$-, C(O)- and $S(O)_2$-;

X^3 is selected from the group consisting of -C(O)H, $-CO_2H$, $-CH_3$, $-C(CH_3)_3$, $-Si(CH_3)_3$, $-SiCH_3(C(CH_3)_3)_2$, $-Si(C(CH_3)_3)_3$, $-Si(PO_4)_2C(CH_3)_3$, a phenyl group, an alkyl-substituted phenyl group having from 1 to 6 [carbons] carbon atoms in the alkyl

chain, an alkyl chain having from 1 to 6 [carbons] carbon atoms, an amino moiety, a chlorine atom, a fluorine atom, or a group having the formula $C(R^3R^4)OH$,

wherein each of R^3 and R^4 is independently an alkyl chain having from 1 to 6 [carbons] carbon atoms, a phenyl group or an alkyl-substituted phenyl group having from 1 to 6 [carbons] carbon atoms in the alkyl chain;

wherein when Z^2 is an amino group, R^2 is an aliphatic chain having from 1 to 9 or from 19 to 23 carbon atoms in the aliphatic chain;

and wherein the compound comprises at least about 5 mole percent of the lipid component.

16. (Amended Twice) A compound having the formula R^1-Y^1-CHZ^1-$CH(NY^2Y^3)$-CH_2-Z^2, wherein:

R^1 is a straight-chained alkyl, alkenyl or alkynyl group having from 5 to 19 carbon atoms in the aliphatic chain;

Y^1 is -CH=CH-, -C≡C- or -CH(OH)CH(OH)-;

Z^1 is OH or a phosphorylcholine attachment-inhibiting group selected from the group consisting of $-X^1$, $-OX^1$, $-X^2X^3$ and $-OX^2X^3$;

Y^2 is H, a phenyl group, an alkyl-substituted phenyl group having from 1 to about 6 carbon atoms in the alkyl chain, or an alkyl chain having from 1 to 10 carbon atoms;

Y^3 is H or a group having the formula $-C(O)R^2$ or $-S(O)_2R^2$;

R^2 is a straight-chained alkyl moiety selected from the group consisting of $-(CH_2)_3CH_3$, $-(CH_2)_5CH_3$, $-(CH_2)_7CH_3$ and $-(CH_2)_9CH_3$, an alkenyl group having from 2 to 23 carbon atoms in the aliphatic chain and an alkynyl group having from 2 to 23 carbon atoms in the aliphatic chain;

Z^2 is OH or a phosphorylcholine attachment-inhibiting group selected from the group consisting of $-X^1$, $-OX^1$, $-X^2X^3$ and $-OX^2X^3$;

X^1 is selected from the group consisting of C(O)H, CO_2H, CH_3, $C(CH_3)_3$, $Si(CH_3)_3$, $SiCH_3(C(CH_3)_3)_2$, $Si(C(CH_3)_3)_3$, $Si(PO_4)_2C(CH_3)_3$, a phenyl group, an alkyl-substituted phenyl group having from 1 to 6 carbon atoms in the alkyl chain, an alkyl chain having from 1 to 6 carbon atoms, an amino group, a fluorine atom, a chlorine atom, and a group having the formula $C(R^3R^4)OH$;

X^2 is selected from the group consisting of CH_2, $C(CH_3)_2$, $Si(PO_4)_2$, $Si(CH_3)_2$, $SiCH_3PO_4$, C(O) and $S(O)_2$;

X^3 is selected from the group consisting of C(O)H, CO_2H, CH_3, $C(CH_3)_3$, $Si(CH_3)_3$, $SiCH_3(C(CH_3)_3)_2$, $Si(C(CH_3)_3)_3$, $Si(PO_4)_2C(CH_3)_3$, a phenyl group, an alkyl-substituted phenyl group having from 1 to 6 carbon atoms in the alkyl chain, an alkyl chain having from 1 to 6 carbon atoms, an amino moiety, a chlorine atom, a fluorine atom, or a group having the formula $C(R^3R^4)OH$, wherein each of R^3 and R^4 is independently an alkyl chain having from 1 to 6 carbon atoms, a phenyl group or an alkyl-substituted phenyl group having from 1 to 6 carbon atoms in the alkyl chain;

wherein when Z^2 is an amino group, R^2 is an aliphatic chain having from 1 to 9 or from 19 to 23 carbon atoms in the aliphatic chain.

Please add new claims 33-57:

-- 33. (New) The pharmaceutical composition of claim 31, further comprising a pharmaceutically acceptable carrier.

34. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 16.

35. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 17.

36. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 18.

37. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 19.

38. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 20.

39. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 21.

40. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 22.

41. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 23.

42. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 24.

C3 cont'd

43. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 25.

44. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 26.

45. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 27.

46. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 28.

47. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 29.

48. (New) A liposome having a bilayer comprising at least about 5 mole percent of the compound of claim 30.

49. (New) A pharmaceutical composition comprising the liposome of claim 34 and a pharmaceutically acceptable carrier.

C3 cont'd

50. (New) A method of treating cancer in an animal in need of the treatment, comprising administering an anticancer effective amount of the composition of claim 33 to said animal.

51. (New) The method of claim 50, wherein said animal is a human.

52. (New) The method of claim 50, wherein the cancer is a brain cancer, breast cancer, lung cancer, ovarian cancer, colon cancer, stomach cancer or prostate cancer.